

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF NEW YORK**

LUCIANO F. PAONE,

Plaintiff,

v.

QUANTENNA COMMUNICATIONS, INC.,

Defendant.

Case No. 15-cv-645

JURY TRIAL DEMANDED

COMPLAINT

Plaintiff Luciano F. Paone (“Paone”) for his complaint against Quantenna Communications, Inc. (“Quantenna”), hereby demands a jury trial and alleges as follows:

The Parties

1. Plaintiff Paone is an individual who resides at 40 Sunset Drive, Manhasset, New York 11030.

2. Upon information and belief, Defendant Quantenna is a Delaware Corporation with its principal place of business at 3450 West Warren Avenue, Fremont, CA 94538.

3. Quantenna makes, uses, sells, and/or offers for sale in the United States, and/or imports into the United States, including in this district, computer products and technology, including for example Quantenna products that include Temporal Key Integrity Protocol (“TKIP”) technology.

Nature of the Action

4. This is a civil action for infringement of United States Patent No. 6,259,789. This action arises under the Patent Laws of the United States, 35 U.S.C. § 1 *et seq.*

Jurisdiction and Venue

5. This Court has jurisdiction over the subject matter of this action pursuant to 28 U.S.C. §§ 1331 and 1338(a) because this action arises under the patent laws of the United States, including 35 U.S.C. § 271 *et seq.*

6. This Court has personal jurisdiction over Quantenna generally because Quantenna has sufficient minimum contacts with the forum as a result of business conducted within the state of New York. Personal jurisdiction also exists specifically over Quantenna because it, directly or through subsidiaries or intermediaries, makes, uses, offers for sale, sells, imports, advertises, makes available, and/or markets products and services within the state of New York that infringe the patent-in-suit, as described more particularly below.

7. Venue is proper in this judicial district pursuant to 28 U.S.C. §§ 1391(b) and (c), and 1400(b), because Quantenna has committed acts of infringement in this district and because Quantenna is subject to personal jurisdiction in this district.

The Patent-In-Suit

8. Paragraphs 1 through 7 are incorporated by reference as if fully stated herein.

9. United States Patent No. 6,259,789 (“the ’789 Patent”), entitled “Computer Implemented Secret Object Key Block Cipher Encryption and Digital Signature Device and Method,” was duly and legally issued to Paone by the United States Patent and Trademark Office on July 10, 2001. A copy of the ’789 Patent is attached hereto as Exhibit A.

10. Three requests for *ex parte* reexamination of the ’789 Patent were filed on May 16, 2008, June 29, 2008, and July 27, 2009, respectively. On December 8, 2009, the United States Patent Office duly and legally issued an *Ex Parte* Reexamination Certificate for the first reexamination request confirming the patentability of original claims 2, 15, 24, 25, 33, 34 and amended claims 4-6, 8, 13, 14, 26 and 35. On March 9, 2010 the United States Patent Office duly

and legally issued an *Ex Parte* Reexamination Certificate for the second reexamination request confirming the patentability of claims 17 and 26. On June 8, 2010 the United States Patent Office duly and legally issued an *Ex Parte* Reexamination Certificate for the third reexamination request confirming the patentability of claims 2, 24-26, 33, and 34.

11. Paone is the exclusive owner of all rights, title, and interest in the '789 Patent, including the right to recover all damages for infringement thereof, including past infringement.

12. The '789 Patent is valid and enforceable.

13. To date, Quantenna has not taken a license to the '789 Patent.

COUNT I: Infringement of United States Patent No. 6,259,789

14. Paragraphs 1 through 13 are incorporated by reference as if stated fully herein.

15. Quantenna has infringed and continues to infringe, literally and/or under the doctrine of equivalents, one or more claims of the '789 Patent under 35 U.S.C. §§ 271(a), (b), and/or (c) based on its making, using, selling, and/or offering for sale in this judicial district and elsewhere in the United States, and/or importing into this judicial district and elsewhere in the United States, Quantenna products that include TKIP technology, including without limitation, QHS710, QHS450, QHS600x, QB840, QSR1000, and QHS610. These and any and all other Quantenna products that include and/or support TKIP technology are referred to herein as "Accused Products."

16. Quantenna is aware of the '789 Patent and Paone's infringement allegations. For example, by a letter dated December 6, 2013, Paone notified Quantenna of the '789 Patent and Quantenna's infringement of that patent, including a detailed claim chart setting forth specifically how Quantenna's products including TKIP technology meet the limitations of certain claims of the '789 Patent. A copy of the December 6, 2013, letter and accompanying claim chart are attached hereto as Exhibits B and C respectively.

17. After Quantenna received the December 6, 2013, letter, Paone and Quantenna have continued to discuss the '789 Patent, including through written correspondence. Through these discussions, Paone attempted to negotiate license terms with Quantenna. Despite Paone's good faith efforts to negotiate a business solution, Quantenna has failed to take a license to the '789 Patent and continues to use Paone's intellectual property without authorization.

18. Upon information and belief, Quantenna directly infringes the '789 Patent under 35 U.S.C. § 271(a) by making, using, selling, and/or offering for sale in the United States, and/or importing into the United States, without authority, infringing methods, products, and/or systems.

19. Quantenna induces infringement of the '789 Patent under 35 U.S.C. § 271(b) by others in the United States. The direct infringement occurs by activities performed by Quantenna, its contractors and employees, and/or end users of the Accused Products, in their intended use, including in wireless networks that utilize TKIP.

20. Quantenna specifically intends third parties to infringe the '789 Patent, or alternatively, has been willfully blind to the possibility that its inducing acts would cause infringement. For example, Quantenna induces infringement by continuing to disseminate products with the infringing TKIP functionality and by its affirmative actions of at least making its website available to customers, providing directions to instruct and teach users to use the Accused Products in an infringing manner, and disseminating promotional and marketing materials, supporting materials, and technical information related to the Accused Products. Examples of such materials may be found at:

<http://www.quantenna.com/qhs-710.html>;

<http://www.quantenna.com/pdf/QHS450.pdf>;

<http://www.quantenna.com/pdf/QHS600xProductBrief.pdf>;

http://www.quantenna.com/ces/Background_Materials/QB840%20Product%20Brief.pdf; and

http://www.quantenna.com/pdf/QHS610_ProductBrief.pdf.

21. Quantenna contributes to the infringement of the '789 Patent under 35 U.S.C. § 271(c). The direct infringement occurs by activities performed by Quantenna, its contractors and employees, and/or end users of the Accused Products, in their intended use, including in wireless networks that utilize TKIP.

22. The TKIP technology in the Accused Products is a material part of the inventions of the '789 Patent. Quantenna has been, and is currently, aware of the '789 Patent and knows the TKIP technology in the Accused Products to be especially made or especially adapted for use in an infringement of the '789 Patent. The TKIP technology in the Accused Products is not a staple article or commodity of commerce, nor is it suitable for any substantial non-infringing use.

23. Upon information and belief, Quantenna's infringement of the '789 Patent was, and continues to be, willful. Quantenna has known about the '789 Patent and the details of its infringement at least since on or about December 6, 2013, as discussed above in Paragraphs 16 and 17. Despite Quantenna's knowledge of and notice of the '789 Patent and its infringement, Quantenna has continued to make, use, sell, offer for sale, and/or import the Accused Products, and has continued to create and disseminate promotional and marketing materials, supporting materials, instructions, and/or technical information related to the infringing aspects of the Accused Products. Quantenna lacks a justifiable belief that it does not infringe the '789 Patent, or that the '789 Patent is invalid. Quantenna has also acted with objective recklessness in its infringing activity.

24. Quantenna's acts of infringement have caused, and continue to cause, damage to Paone. Under 35 U.S.C. § 284, Paone is entitled to recover from Quantenna the damages sustained by Paone as a result of Quantenna's infringement of the '789 Patent.

25. Quantenna's conduct in infringing the '789 Patent renders this case exceptional within the meaning of 35 U.S.C. § 285.

Prayer for Relief

WHEREFORE, Paone respectfully requests that this Court enter judgment against Quantenna as follows:

- A. That Quantenna has infringed the '789 Patent;
- B. That Quantenna's infringement of the '789 Patent is willful;
- C. That Paone be awarded all damages adequate to compensate him for Quantenna's infringement of the '789 Patent in accordance with 35 U.S.C. § 284 and, if necessary to adequately compensate Paone for the infringement, an accounting, and that such damages be trebled and awarded to Paone with prejudgment and postjudgment interest;
- D. That this case be declared an exceptional case within the meaning of 35 U.S.C. § 285 and that Paone be awarded the attorney fees, costs, and expenses incurred in connection with this action; and
- E. That Paone be awarded such other and further relief as this Court deems just and proper.

JURY DEMAND

Paone hereby demands a trial by jury on all claims and issues so triable.

Dated: February 9, 2015

Respectfully submitted,

/s/ Sean T. Doyle

Jon T. Hohenthanner (JH 5708)

Andrew G. Heinz (AH 2704)

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